# CONSOLIDATED INFORMATION TECHNOLOGY SERVICES TASK ASSIGNMENT (TA)

1. **TITLE:** (D309) DDTRB COMPUTER SYSTEM ADMINISTRATION

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| **TA No:** | RCC001-Rev7 | | |
| **Task Area Monitor:** | Christopher Sandridge | **Alternate Task Area Monitor:** | Jonathan Ransom |
| **NASA POC:** | None | **Software Control Class:** | Low Control |
| **Type of Task:** | Non-Recurring Task | | |

2. **BACKGROUND**

The DDTRB computer lab consists of a heterogeneous network of UNIX workstations, cluster systems, advanced visualization systems, PC file servers, backup tape system, and desktop and laptop computers in Buildings 1229 and 1205. Special networking and computer equipment is included in the advanced visualization system located in Bldg. 1229.

Software includes UNIX, Linux, MacOS, and Windows operating systems, commercial analysis applications, CAD/CAM and graphics software packages, license managers, compilers, software development utilities, and basic web services.

On-site system administration for hardware and software is required to maintain network security and resource availability for NASA personnel, contractors, and grantees, within and outside the Langley network domain.

3. **OBJECTIVE**

The objective of this task assignment is to provide system administration support for the Durability, Damage Tolerance, and Reliability Branch computer lab.

4. **GENERAL IT SUPPORT SERVICES**

**Services Specified Through Exhibit A:**
Refer to Exhibit A, Inventory of Equipment and Software (attached), that has been completed to define the required general IT support services.

The services of System and IT Security Administration shall be provided for those systems for which "System and IT Security Administration Required" is checked in Exhibit A. The level of security shall be consistent with the information category identified by the code checked for each such system (see NPG 2810.1). If these services are not required for the system as a whole, they shall be provided for any isolated processors where the information category code is entered in the SSA column.

Any system software, application software, or database software that is licensed to run on a

particular item of equipment is entered in the respective column for that item. Software that does not require a license is also included if it is relevant to any of the required services.

The services of System Administration (SA), Hardware Maintenance (HM), System Software Maintenance (SSM), Applications Management (AM), and Database Administration (DBA), are required for the items of equipment or software that are checked in the respective columns of Exhibit A.

**Customer Support and IT Consultation and Training:**
The Contractor shall provide the basic level of Customer Support and IT Consultation and Training given in Section 4.7 and Section 4.8 clauses a) and c) of the SOW for all General IT Support Services.

The Contractor shall provide recommendations to the TAM for improving the system administration of CSMB IT resources, while maintaining or improving the productivity of the research personnel using the computers.

**Exceptions and Additional Requirements:**
For systems that are covered under vendor or third-party hardware or software maintenance contracts, the Contractor shall obtain quotes for replacement parts or upgrades and provide them to the LaRC point of contact for procurement.

The Contractor shall assist the Government in coordination of construction of new computer facilities and relocation of computer equipment. Typical areas include recommendations for power and cooling of computing equipment, space utilization, networking and cabling issues, and scheduling.

The Contractor shall provide basic system support for audio-visual equipment and computers located in the DDTRB conference rooms (Room 222 and 256 of Bldg. 1205) and the Immersive Design and Simulation Lab (Room 130 of Bldg. 1229). The support shall include customer support and consultation to the users of the facilities for the use of the equipment and assistance in integrating software and additional hardware for demonstrations or presentations.

Contractor personnel will be located on-site in the DDTRB office area. Computer systems will be set up to operate 24 hrs. per day, 7 days per week. Operations outside of normal working hours will be monitored and problems will be reported to the Technical Monitor or other designated personnel within 2 hours of the start of the next business day.

Initial priority of work areas are designated as: 1) availability of UNIX/Linux computer systems, shared file systems, and network connectivity, 2) availability of IDSL equipment, 3) availability of Windows-based file and application servers, 4) update of system and application software, 5) installation of new equipment, 6) availability of the DDTRB web site, and 7) all other work. The above priorities will be discussed in regular review meetings and may be changed by mutual consent of the contractor and technical monitor. The contractor shall report work requests made by branch personnel to the technical monitor at regular review meetings, when priorities will be assigned among outstanding work.

The Contractor shall maintain a list of root passwords for the computers listed in Exhibit A and update the list when any root password is changed. The Contractor shall deliver the list by hand to the TAM within 1 working day of any changes.

The Contractor shall perform backups of computer file systems for the computers listed in Exhibit A to minimize the risk of corrupted or lost data. The backups of UNIX/Linux file systems shall be performed in such a manner to fully restore the complete file systems on a given day to their state 48 hours previous. Backup media shall be retained for at least 60 days. Backups of PC and Mac computers designated by the technical monitor shall be performed in such a manner to fully restore the complete file systems to their state one week previous. The Contractor shall notify the technical monitor when changes to backup methods and schedules are made.

For computers that fall under ODIN system maintenance, the Contractor shall install non-ODIN-supported software at user request and shall configure the software to obtain network licenses if applicable. Any other work associated with ODIN-supported equipment shall be handled on a low-priority basis unless the technical monitor makes a special request.

The Contractor shall maintain an inventory of hardware and software and a log of hardware and software changes and upgrades. The Contractor shall update the inventories and log weekly to reflect changes made in the previous week and make the inventories and log available on the DDTRB file server to be read by the technical monitor and other DDTRB personnel. When new equipment is received, the Contractor shall obtain the technical monitor's approval of a plan for installation of the equipment and shall perform the installation in a timely manner.

The Contractor shall monitor costs in each work area, as well as the overall cost of the task, so as not to exceed the government approved cost estimates. The Contractor shall bring to the attention of the technical monitor any work to be performed under this task assignment that will cause cost overruns or a large increase in spending rate in any work area.

**General IT Support Services Performance Metrics**
Performance Standard: The applications software to which these services apply is fully operational and kept up-to-date with no significant disruption in capability.
Performance Metrics:

Exceeds: "Meets" and improvements are recommended and adopted; or users rate help in the use of applications very good to excellent.

Meets: The inventory, including status, of application software is current and accurate. Upgrades are installed and fully operational within 5 days of receipt (or approval, if later) with no loss of data. Users rate operation and help in use of the applications satisfactory.

Fails: Any of the requirements of this subsection are not satisfied. Users rate operation and help in use of the applications less than satisfactory.

Performance Standard: Inventory of equipment and software is up-to-date and accurate.
Performance Metrics:

Exceeds: "Meets" and: semi-annual audit finds no deviations from the actual configuration, or improvements have been made to the configuration

management system.

Meets: Data format is satisfactory, semi-annual audit finds only minor deviations from actual configuration, and tracking log is up-to-date.

Fails: Any of the requirements of this subsection are not satisfied.

<u>Performance Standard</u>: The systems to which these services apply are kept up-to-date with minimum disruption in capability due to upgrades.

<u>Performance Metrics</u>:

Exceeds: Notifications of updates or upgrades are acted upon and approved upgrades are installed on schedule and without disruption; or "meets" and improvements to systems are recommended and adopted.

Meets: Notifications of updates or upgrades are acted upon. Approved upgrades are installed with minor delays and disruptions.

Fails: Any of the requirements of this subsection are not satisfied.

<u>Performance Standard</u>: The security of systems and data that fall under this TA is ensured

<u>Performance Metrics</u>:

Exceeds: The system meets the baseline IT security requirements for an information category; there are no unlatched vulnerabilities, unless the vulnerability has been mitigated by other action, accepted by line management and approved by the LaRC IT Security Manager; user accounts are removed by the close of business of the day that the requirement for an account is terminated.

Meets: Baseline IT security requirements for the information category are either met or have a waiver for non-compliance from the LaRC IT Security Manager; the system is up-to-date with security patches or has scheduled the installation of such patches at the completion of a test that precludes immediate installation; user accounts are removed within one week of the termination of the requirement for an account; any IT Security incidents are reported to the LaRC IT Security Manager as soon as possible after they are discovered.

Fails: The system does not comply with the baseline IT security requirements for the information category and does not have a waiver for non-compliance from the LaRC IT Security Manager; the system is not up-to-date with IT security patches; user accounts, for which the requirement was terminated have not been removed after a period of two weeks; the system has an IT security incident that is not reported to the LaRC IT Security Manager.

## 5. SYSTEM AND APPLICATION DEVELOPMENT SERVICES

None required.

## 6. WORK-AREA SPECIFIC SERVICES

None required.

7. **Exhibit A**

Exhibit A

8. **SPECIAL SECURITY REQUIREMENTS**

None.

9. **SOFTWARE ENGINEERING PROCESS REQUIREMENTS**

None.

10. **JOINT REVIEW SCHEDULE**

There will be a joint review of the work of this task at meetings to be held once a month. The following persons or their alternates are required to attend: NASA technical monitor and Contractor task lead. Technical performance, prioritiy of pending work, timeliness, and cost will be discussed. The contractor shall maintain minutes; and at the beginning of each meeting the minutes of the previous meeting will be reviewed.

11. **PERIOD OF PERFORMANCE**

This TA is effective from 02/01/08 to 04/27/09

12. **TECHNICAL PERFORMANCE RATING**

In evaluating Technical Performance, quality and timeliness shall be rated as follows:

Quality:  60%     Timeliness:  40%

13. **RESPONSE REQUIREMENTS**

This Task Plan shall address the contractor's specific work plans, associated estimated labor hours, cost and schedule.

14. **FUNDING INFORMATION**

Funding last submitted on 03/18/2008.

15. **MILESTONES**

None required.

16. **DELIVERABLES**

| Number | Deliverable Item | Deliverable Schedule |
|--------|------------------|----------------------|
| 1 | Inventory of hardware and | Updated by the end of each month when changes |

| | software | have been made |
|---|---|---|

## 17. FILE ATTACHMENTS

None.